IN THE CLAIMS:

1-24. (Canceled)

25. (Currently amended) A spacer for holding a number of elongated fuel rods intended to be located in a nuclear plant, wherein said spacer encloses a plurality of sleeves, each forming a cell having a longitudinal axis and arranged to receive a fuel rod in such a way that the fuel rod extends substantially parallel with the longitudinal axis,

the sleeves being permanently connected to each other in the spacer,

each sleeve forming a single cell arranged to receive a single one of the fuel rods,

each sleeve being manufactured of a sheet-shaped material of a nickel-based alloy, ~~the material being formed into a substantially cylindrical shape and extending around and limiting said single cell dimensioned for housing said single one of the fuel rods,~~

the sheet-shaped material having a first end and a second end and ~~the sheet shaped material~~ comprising a first connection portion in the proximity of the [[a]] first end and a second connection portion in the proximity of the [[a]] second end, ~~the first end overlapping the second end~~,

the sheet-shaped material being formed into a substantially cylindrical shape in such a way that the first end overlaps the second end, wherein the sheet-shaped material extends around the single cell dimensioned for housing the single one of the fuel rods,

the sheet-shaped material having a material thickness, which is less than about 0.20 mm, and

~~the first connection portion and the second connection portion being permanently connected to each other by means of at least one weld joint~~ each sleeve comprising at least one weld joint permanently connecting the first connection portion and the second connection portion to each other.

26. (Canceled)

27. (Previously presented) A spacer according to claim 25, wherein said weld joint includes a spot weld.

28. (Previously presented) A spacer according to claim 25, wherein the nuclear plant is arranged to permit re-circulation of a coolant flow and wherein the spacer is arranged to be located in the coolant flow, the spacer including at least one vane for influencing the coolant flow.

29. (Previously presented) A spacer according to claim 28, wherein said vane is formed by a portion of the material, which extends from the first connection portion.

30. (Previously presented) A spacer according to claim 28, wherein said vane is inclined in relation to the longitudinal axis.

31-32. (Canceled)

33. (Previously presented) A spacer according to claim 25, wherein the sheet-shaped material has a material thickness, which is less than or equal to about 0.18 mm.

34. (Previously presented) A spacer according to claim 25, wherein the sleeve has an upper edge and a lower edge.

35. (Previously presented) A spacer according to claim 34, wherein the sleeve includes a number of ridges, which project inwardly towards the longitudinal axis and extend substantially in parallel with the longitudinal axis for abutment to the fuel rod to be received in the cell.

36. (Previously presented) A spacer according to claim 35, wherein said ridges extend from the upper edge to the lower edge.

37. (Previously presented) A spacer according to claim 35, wherein each sleeve includes at least four of said ridges.

38. (Previously presented) A spacer according to claim 34, wherein the lower edge, seen transversely to the longitudinal axis , has a wave shape with wave peaks and wave valleys and

that the upper edge, seen transversely to the longitudinal axis , has a wave shape with wave peaks and wave valleys.

39. (Previously presented) A spacer according to claim 38, wherein the sleeve includes a number of ridges which project inwardly towards the longitudinal axis and extend substantially in parallel with the longitudinal axis for abutment to the fuel rod to be received in the cell, and wherein said wave peaks are aligned with a respective one of said ridges, and wherein said wave valleys are located between two adjacent ones of said ridges.

40. (Previously presented) A spacer according to claim 38, wherein the sleeves abut each other in the spacer along a connection area extending in parallel to the longitudinal axis between one of said wave valleys of the upper edge and one of said wave valleys of the lower edge.

41. (Previously presented) A spacer according to claim 40, wherein the sleeves are permanently connected to each other by means of weld joints.

42. (Previously presented) A spacer according to claim 40, wherein said weld joint includes an edged weld at said connection area at least one of the upper edge and the lower edge.

43. (Previously presented) A spacer according to claim 25, wherein the sleeve seen in the direction of the longitudinal axis has four substantially orthogonal long sides.

44. (Previously presented) A spacer according to claim 43, wherein the sleeve includes a number of ridges which project inwardly towards the longitudinal axis and extend substantially in parallel with the longitudinal axis for abutment to the fuel rod to be received in the cell, and wherein each long side includes one of said ridges.

45. (Previously presented) A spacer according to claim 43, wherein the nuclear plant is arrange to permit re-circulation of a coolant flow, wherein the spacer is arranged to be located in the coolant flow, the spacer including at least one vane for influencing the coolant flow, and wherein said vane extends outwardly from one of said four substantially orthogonal long sides.

46. (Previously presented) A spacer according to claim 43, wherein the sleeve seen in the direction of the longitudinal axis has four substantially orthogonal short sides, wherein each short side connects two of said four substantially orthogonal long sides.

47. (Previously presented) A spacer according to claim 46, wherein the sleeve has an upper edge and a lower edge, and wherein each short side includes a portion of one of said wave valleys of the upper edge and a portion of one said wave valleys of the lower edge.

48. (Currently amended) A fuel unit for a nuclear plant comprising:

a number of elongated fuel rods, and

a number of spacers for holding the fuel rods, wherein

the spacers enclose a plurality of sleeves, each forming a cell having a longitudinal axis and being arranged to receive one of said fuel rods in such a way that the fuel rod extends in parallel to the longitudinal axis,

the sleeves being permanently connected to each other in the spacer,

each sleeve forming a single cell arranged to receive a single one of the fuel rods,

each sleeve being manufactured of a sheet-shaped material of a nickel-based alloy, ~~the material being formed into a substantially cylindrical shape and extending around and limiting said single cell dimensioned for housing said single one of the fuel rods,~~

the sheet-shaped material having a first end and a second end and ~~the sheet shaped material~~ comprising a first connection portion in the proximity of the [[a]] first end and a second connection portion in the proximity of the [[a]] second end, ~~the first end overlapping the second end~~,

the sheet-shaped material being formed into a substantially cylindrical shape in such a way that the first end overlaps the second end, wherein the sheet-shaped material extends around the single cell dimensioned for housing the single one of the fuel rods,

the sheet-shaped material having a material thickness, which is less than about 0.20 mm, and

~~the first connection portion and the second connection portion being permanently connected to each other by means of at least one weld joint~~ each sleeve comprising at least one weld joint permanently connecting the first connection portion and the second connection portion to each other.